



The following questions or issues were brought forward as part of the May 22, 2008 and June 26, 2008, South Mountain Citizens Advisory Team (SMCAT) meetings and designated as parking lot issues because the study team needed to conduct research to address the question or issue accordingly. In addition, questions submitted on blue question cards by SMCAT members and the public are answered below. Each comment received on a blue question card is written in this document as submitted. Each parking lot issue is addressed by presenting the question asked, followed by the Arizona Department of Transportation's (ADOT) written response.

This document is divided into two sections. The first section lists those questions that have ADOT responses. The subsequent section contains the questions that will be addressed in a future parking lot issues memorandum.

Questions answered from May 22, 2008, SMCAT meeting

Topic	SMCAT member/public question	ADOT response			
Energy	I would like to see some of the underlying figures that you used to compute your energy numbers. I don't see that much fuel being used in the Study Area.	Please see attached supplemental information for the energy analysis.			
	On slide 51 of the PowerPoint, you mentioned that there was an anticipated vehicle mix. Do you have specific numbers for each of these categories?				
	When you provide us with the vehicle mix percentages, can you provide a breakdown of each of the elements: cars, light and heavy trucks, etcetera?				
Noise	On slide 64, the range of noise levels was stated as being from 61 to 79 decibels. Where is the 79 decibel location?	The 79 decibel location was at receiver 46 located west of the W55 Alternative in the Rancho Grande neighborhood.			
Right-of-way	How much money did ADOT pay the Salt River Pima- Maricopa Indian Community for permission to build the Loop 101 on their property? Who was the key force in that decision-making process? Was it ADOT or the Mayor of Scottsdale (Herb Drinkwater)?	More than \$200 million was paid to the Salt River Pima-Maricopa Indian Community for right-of-way acquisition and impact mitigation in connection with the construction of the Loop 101 Pima Freeway. The decision-making process was a collaboration of a number of agencies and individuals.			

Topic	SMCAT member/public question	ADOT response
Traffic	Do you know how many trucks currently utilize that bypass route [I-8 and SR 85]?	There have been no studies conducted specifically to determine the number of trucks that use the bypass route. Based on the most recent traffic counts from ADOT for the year 2007, approximately 1,700 to 3,800 trucks per day travel on Interstate 8 between Interstate 10 and SR 85 and between 3,000 and 4,000 trucks per day travel on SR 85 between I-8 and I-10.

Questions to be addressed in a future parking lot issues memorandum

Topic	SMCAT member/public question
Noise	Please present actual data to the SMCAT–for example the readings at the 139 locations. Telling us the background information is not presenting data, findings or results. Provide those data points for sound monitor and receivers M1-M13 and R1-R35 in the parking lot response for the July meeting.
Local Access	Currently the foothills area has six ways to access Pecos Road: 40 th , 32 nd and 24 th streets, Desert Foothills Parkway, and 17 th and 27 th avenues. The proposed South Mountain Freeway eliminates the 32 nd Street access. Based on data from the City of Phoenix, this one mile street carries 8,100 vehicles per day. Now where is that traffic going to go—the side streets like Liberty Lane or on Chandler Boulevard to 24 th or 40 th streets? Now to put that 8,100 number in perspective based on the MAG computer model, if the South Mountain Freeway is built it will result in a 7 percent reduction on the Broadway Curve. Assuming 200,000 vehicles per day that means a reduction of 14,000 vehicles per day would be removed from this location. The additional overflow into our village streets because of no 32 nd Street access is nearly 60 percent of the above number. How is ADOT going to mitigate this local issue or is ADOT going to say that it is a City of Phoenix problem?

Annual energy consumption calculations in the Study Area

Alternative	Weekday average VMT ^a	Weekday average VHT ^a	Average Speed ^b (mph)	Total VMT/ year ^c (millions)	Light duty car VMT/ year (millions)	Light duty trucks VMT/ year (millions)	Heavy duty trucks and buses VMT/ year (millions)	Light duty car gallons/ year ^d (millions)	Light duty trucks gallons/ year ^d (millions)	Heavy duty trucks and buses gallons/ year ^d (millions)	Total gallons/ year (millions)
Action Alternative	28,980,000	850,000	34	9,040	6,860	1,890	290	360	124	57	541
No-Action Alternative	25,930,000	900,000	29	8,090	6,140	1,690	260	486	168	79	733

Vehicle mix and efficiency data for vehicles in the Study Area

			Heavy duty
		Light duty	trucks and buses
Vehicle Type	Light duty car (%)	trucks (%)	(%)
Vehicle Mix ^e	75.9%	20.9%	3.2%
Base Fuel efficiency ^f (mpg)	22	18	6

Notes:

VMT = vehicle miles traveled; VHT = vehicle hours traveled; mph = miles per hour; mpg = miles per gallon

^a Source: Maricopa Association of Governments Regional Demand Model Results, 2007

^b Calculated by dividing VMT by VHT

^c Daily projections were converted to annual projections by assuming 6 days per week (the equivalent of one day of traffic for Saturday and Sunday combined) and 52 weeks per year.

^d Gallons/year data were determined by dividing the VMT for each category by an assumed base fuel economy factor for each class, adjusted by miles per gallon according to speed.

^e Source: South Mountain Freeway, Air Quality Technical Report, 2007. Motorcycles and alternative fuel and electric vehicles were assumed to have an insignificant contribution to the total energy use. Percentages are for all roadways within the Study Area.

^f Source: Energy Information Administration, *Monthly Energy Review*. 2007. (Most recent data available is from 2006.)